Part – I (MCQ Section)	Marks: 80
Section A: English Proficiency	**Marks: 1×20 = 20**

Q. (1-5) Select a pair of words that expresses a relationship similar to that expresses in the original pair.   **1×5 = 5**

1. HEAT : CALORIES
   (a) exercise : energy   (b) steam : pressure   (c) liquid : gallons   (d) lamp : watts

2. TEACHER : CERTIFICATION
   (a) driver : license   (b) librarian : book   (c) architect : blueprint   (d) mechanic : tool

3. MICROSCOPE : SMALL
   (a) camera : photographic   (b) lens : refracted   (c) periscope : military   (d) telescope : distant

4. GLOSSARY : TEXT
   (a) abstract: dissertation   (b) legend : map   (c) index : catalog   (d) bibliography : source

5. QUEUE : PEOPLE
   (a) gaggle : geese   (b) pile : sand   (c) string : pearls   (d) stack: books

Q. (6-10): Correct the underlined portion of each sentence.   **1×5 = 5**

6. They <u>were all shocked at</u> his failure in the competition.
   (a) were shocked at all   (b) had all shocked at
   (c) had all shocked by   (d) No correction required

7. He is too important <u>for tolerating</u> any delay.
   (a) to tolerate   (b) to tolerating   (c) at tolerating   (d) with tolerating

8. The performance of our team was rather <u>worst than I had expected</u>.
   (a) bad as I had expected   (b) worse than I had expected
   (c) worse than expectation   (d) worst than was expected

9. Hardly <u>does the sun rise</u> when the stars disappeared.
   (a) have the sun rose   (b) had the sun risen
   (c) did the sun rose   (d) the sun rose

10. Tax evaders <u>should heavily punished</u> as they do it intentionally.
    (a) should be heavily fined   (b) shall have heavy fine
    (c) should have heavily fined   (d) should be heavy fined

Q. (11-15) Choose the appropriate word or set of words to fill in the blank for the following sentences.   **1×5 = 5**

11. Unlike the misleading television documentary, the biography was _____.
    (a) interesting   (b) accurate   (c) fantastic   (d) phony

12. The availability of oxygen is an essential _____ for animal life, while carbon dioxide is equally _____ for plant life.
    (a) choice, optional   (b) duplication, selective
    (c) conversion, exchangeable   (d) condition, necessary

13. Any language is a conspiracy against experience in the sense that it is a collective attempt to _____ experience by reducing it into discrete parcels.
    (a) manage   (b) complicate   (c) amplify   (d) transcribe

14. Actual events in the history of life on earth are accidental in that any outcome embodies just one _____ among millions; yet each outcome can be _____ interpreted.
    (a) coincidence, randomly   (b) possibility, rationally
    (c) fact, readily   (d) happening, uniquely

15. Any population increase beyond a certain level necessitates greater.... vegetable foods; thus, the ability of a society to choose meat over cereals always arises, in part, from...the number of people.
    (a) reliance on...replenishing
    (b) production of...estimating
    (c) spending on...concealing
    (d) recourse to. ...limiting

Q. (16-20): Read the given passage and answer the questions   **1×5 = 5**

It isn't known when and where it all began, but throughout the ages and in the most diverse of all societies, precious stones have held an almost mystical power and significance. They shone round the necks and embellished the fingers of the ancient Egyptians; they gleamed from the turbans of great Mogul emperors and they were centrally the myth of the Holy Grail. From the earliest times, precious stones have gained a value far beyond and rational assessment of their worth. Some of the best-known gems were deemed so valuable that they financed large armies; others led men to torture and murder, or literally changed the destinies of whole countries.

16. Precious stones are of much value for man as _____.
    (a) they are thought to be valuable and mysterious
    (b) they may be used as a financial source
    (c) they are thought to have a historical value
    (d) not many people can buy them

17. Precious stones are concluded to _____.
    (a) have destroyed many civilizations
    (b) be the most necessary objects for happiness
    (c) have been the most important part of life throughout the history
    (d) to be as old as history

18. The passage concerns _____.
    (a) the power of previous stones
    (b) the value of stones
    (c) treasure
    (d) the mystery of previous stones

19. Stones received an importance because _____.
    (a) they were really valuable
    (b) they were irrationally assessed
    (c) the emperors ordered to treat them so
    (d) they were found in Egypt

20. Precious stones were valued by _____.
    (a) Mogul emperors
    (b) Egyptians
    (c) large armies
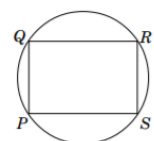   (d) all of the above

Section B: Mathematics	**Marks: 1.5×20 = 30**

(Q. 21-40): Choose the correct answer.

21. Simplify: y + [y − (x + y) − {y − (y − x − y)} + 2x]
    (a) 0
    (b) x
    (c) 4x
    (d) x/2

22. If $x + \frac{1}{x} = 2$, what is the value of $\frac{1}{x^2+x+1}$?
    (a) 4
    (b) 3
    (c) 2
    (d) 1

23. Students of a class stand in a queue. If Ratan is 19th in order from both ends, how many students are there in the queue?
    (a) 20
    (b) 37
    (c) 38
    (d) 39

24. In a survey it has found that 65% of the people polled watched the news on television, 40% read in a newspaper and 25% read a newspaper and watched the news on television. What percent of the people surveyed neither watched the news on television nor read a newspaper?
    (a) 10%
    (b) 15%
    (c) 20%
    (d) 25%

25. A class starts at 10 am and lasts till 01.30 pm. Four periods are held during this interval. After every period, 10 minutes are given free to the students. What is the exact duration of each period?
    (a) 40 min
    (b) 42 min
    (c) 45 min
    (d) 50 min

26. A bag contains equal number of 25 paisa, 50 paisa and one-taka coins respectively. If the total value is Tk.105, how many coins of each items are present?
    (a) 75 coins
    (b) 60 coins
    (c) 30 coins
    (d) 25 coins

27. A man invests Tk.3000 at the rate of 5% per annum. How much more should he invest at the rate of 8%, so that he can earn a total of 6% per annum?
(a) Tk.1200   (b) Tk.1300   (c) Tk.2000   (d) Tk.1500

28. A clock seen through a mirror, shows quarter past three. What is the correct time shown by the clock?
(a) 3:15   (b) 7:15   (c) 8:45   (d) 9:45

29. If a person walks at 14 km/hr instead of 10 km/hr, he can cover 20 km more. The actual distance travelled by him is -
(a) 50 km   (b) 56 km   (c) 70 km   (d) 80 km

30. Eight people are planning to share equally the cost of a rental car. If one person withdraws from the arrangement and the others share equally the entire cost of the car, then the share of each of the remaining persons will be increased by -
(a) 1/8   (b) 1/7   (c) 7/8   (d) None of these

31. The basic one-way air fare for a child aged between 3 and 10 years costs half the regular fare for an adult plus a reservation charge that is the same on the child's ticket as on the adult's ticket. One reserved ticket for an adult cost Tk.216 and the cost of a reserved ticket for an adult and a child (aged between 3 and 10) costs Tk.327. What is the basic fare for the journey for an adult?
(a) Tk.111   (b) Tk.52.50   (c) Tk.210   (d) Tk.58.50

32. If the mean of numbers 28, x, 42, 78 and 104 is 62, what is the mean of 48, 62, 98, 124 and x?
(a) 78   (b) 58   (c) 390   (d) 310

33. Three friends Arif, Belal, and Chaman divide BDT 1105 amongst them in such a way that if BDT 10, BDT 20, and BDT 15 are removed from the sums that Arif, Belal, and Chaman received respectively, then the share of the sums that they got will be in the ratio of 11 : 18 : 24. How much did Chaman receive?
(a) BDT 510   (b) BDT 480   (c) BDT 495   (d) BDT 375

34. In an election contested by two parties, Party D secured 12% of the total votes more than Party R. If party R got 132,000 votes, by how many votes did it lose the election?
(a) 240,000   (b) 168,000   (c) 36,000   (d) 24,000

35. By selling an article at 80% of its marked price, a merchant makes a loss of 12%. What percentage of profit will the merchant make if the article is sold at 95% of its marked price?
(a) 5% profit   (b) 1% loss   (c) 5.5% profit   (d) 4.5% profit

36. A train traveling at 72 kmph crosses a platform in 30 seconds and a man standing on the platform in 18 seconds. What is the length of the platform in meters?
(a) 240 meters   (b) 360 meters   (c) 420 meters   (d) 600 meters

37. The area of a square field is 24200 sq m. How long will a lady take to cross the field diagonally at the rate of 6.6 km/hr?
(a) 3 minutes   (b) 0.04 hours   (c) 2 minutes   (d) 2.4 minutes

38. What is the area of an isosceles triangle if two of its sides measure 6 and 12?
(a) $9\sqrt{15}$ (b) $15\sqrt{5}$ (c) $8\sqrt{5}$ (d) $9\sqrt{5}$

39. The perimeter of a square is equal to the perimeter of a rectangle whose length and width are 6m and 4m respectively. The side of the square is -
(a) 5m   (b) 4m   (c) 3m   (d) 6m

40. In the figure, rectangle PQRS is inscribed in the circle, and PQ = 6. If the area of the rectangular region PQRS is 48, what is the area of the circular region?
(a) 10π (b) 25π (c) 6π (d) 48π

Q. (41-45): Answer the questions based on the following information.   **2×5 = 10**

Income tax is paid from profit before tax and the remaining amount is apportioned to Dividend and retained earnings. The retained earnings are accumulated into reserves. The reserves at the beginning of 2001 were Tk. 80 million.

Tk. in million	2004	2003	2002	2001
Share capital	310	205	98	98
Sales	6435	4725	2620	3270
Profit Before Tax	790	525	170	315
Dividends	110	60	30	30
Retained Earnings	400	245	70	140

41. In which year was the tax per taka of profit before tax the lowest?
    (a) 2001   (b) 2002   (c) 2003   (d) 2004

42. In which year was the sales per taka of share capital the highest?
    (a) 2001   (b) 2002   (c) 2003   (d) 2004

43. In which year was the profit before tax per taka of sales the highest?
    (a) 2001   (b) 2002   (c) 2003   (d) 2004

44. In which year was the percentage addition to reserves over previous years' reserves the highest?
    (a) 2001   (b) 2002   (c) 2003   (d) 2004

45. Amount of the reserves at the end of 2004 was
    (a) Tk.935 million   (b) Tk.915 million   (c) Tk.230 million   (d) Tk. 953 million

Q. (46-50): Answer the following questions.   **2×5 = 10**

46. Ram's mother's sister is Vikram's father's wife. How is Vikram related to Ram?
    (a) Brother   (b) Cousin   (c) Father   (d) Uncle

47. If '+' means 'x' and '-' means '+', then what will be the value of 56 + 20 - 19?
    (a) 930   (b) 491   (c) 1139   (d) 728

48. How many people are there in the group, if it is known that while standing in a straight-line A and E are at the ends and there are 3 people in between them?
    (a) 4   (b) 7   (c) 2   (d) 5

49. In a certain code language, the word "PENCIL" is coded as "CEILNP". How is the word "MOBILE" coded in that language?
    (a) OBELIM   (b) BEILMO   (c) LOBMEI   (d) BOMLEI

50. What is the maximum number of common points a square and a rectangle can have when they intersect each other?
    (a) 4   (b) 10   (c) 6   (d) 8

Q. (51-60): Answer the following questions.

51. Who was the first governor of Bangladesh Bank?
    (a) ANM Hamidullah
    (b) Md. Nurul Islam
    (c) Khorshed Alam
    (d) Shegufta Bakht Chowdhury

52. USA won liberty from which country?
    (a) UK
    (b) France
    (c) Germany
    (d) Italy

53. Which of the following organization runs the program known as "Alokito Manush"?
    (a) Dhaka University
    (b) Bangla Academy
    (c) Shishu Academy
    (d) Biswa Shahitya Kendra

54. Which one of the following is not a primary color?
    (a) Blue
    (b) Purple
    (c) Yellow
    (d) Red

55. Which is the National Agriculture Day?
    (a) December 21
    (b) December 23
    (c) December 25
    (d) December 27

56. Which of the following indicates the source of renewable energy?
    (a) Solar, Wind, Nuclear and Gas
    (b) Solar, Nuclear, Biomass and Gas
    (c) Solar, Wind, Tidal and Biomass
    (d) Oil, Coal, Nuclear and Gas

57. URL stands for -
    (a) Uniform Resource Locator
    (b) Uniform Routing Location
    (c) Uniform Response Locator
    (d) Unify Resource Locator

58. COP 29 is the United Nations Climate Change Conference taking place in Baku from 11 to 22 November 2024. The Baku is the capital and largest city of _____
    (a) Uzbekistan
    (b) Armenia
    (c) Georgia
    (d) Azerbaijan

59. Republicans win ____ US House seats, giving Donald Trump and the party control of US government
    (a) 218
    (b) 216
    (c) 220
    (d) 210

60. Currently, 53 Banks of Bangladesh are now interconnected through _____for their ATM transactions.
    (a) RTGS
    (b) NPSB
    (c) BACPS
    (d) BEFTN

Part – II (Written Section)	Marks: 50

1. Translate the following into English   **10**

কঠোর পরিশ্রম সফলতার চাবিকাঠি। প্রতিদিন পড়াশোনার জন্য সময় দেওয়ার মাধ্যমে নিজেদের লক্ষ্য অর্জন করা সম্ভব। যদিও মাঝে মাঝে ক্লান্তি আসে, তবুও লক্ষ্য অর্জনের জন্য এগিয়ে যেতে হয়। সঠিক শিক্ষা লাভের জন্য একটানা অধ্যাবসায় এবং মনোযোগী থাকার বিকল্প নাই। ছাত্রদের জন্য কঠোর পরিশ্রমের বিকল্প নেই, এবং এটি তাদের সাফল্যের মূল সূত্র।

2. Translate the following into Bengali   **10**

A leading Bangladeshi industrialist in a recent article on ways to strengthen Bangladeshi economy has drawn attention to the problems of inflation and industrial sickness among other things. One of the main reasons for industrial sickness in our country has been the fact that business and industrial managers have not been able to look beyond the immediate future. They have been too preoccupied with their attempts to report favorable results for the current year- higher profits and larger dividends to the shareholders. The planning horizon has hardly ever exceeded five years and asset creation have seriously lagged behind. Investments have been inadequate in new plants for diversification, expansions and modernization.

3. Analytical Writing   **15**

"Pollution Control versus Economic Growth." Analyze the statement and put forward your arguments and counter arguments on the issue.

4. Write an Essay on **"Using Jute and Cotton Bags in Superstores"**   **15**